

Fluid Power Valve and Hose Fitting Manufacturing: 2002

Issued September 2004

EC02-311-332912

2002 Economic Census

Manufacturing

Industry Series



USCENSUSBUREAU

Helping You Make Informed Decisions

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU



Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year ¹	Com- panies ²	All estab- lish- ments ³	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)	
			Number ⁴	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)					
332912, Fluid power valve and hose fitting manufacturing	2002..	335	400	33 658	1 382 001	23 362	46 236	803 272	3 809 363	2 366 732	6 236 568	214 973
	2001..	N	N	35 845	1 380 161	24 353	49 080	756 191	3 643 366	2 600 773	6 250 889	202 479
	2000..	N	N	37 826	1 431 692	26 454	53 555	812 215	3 975 319	2 812 521	6 744 959	217 929
	1999..	N	N	37 872	1 417 801	26 183	53 059	790 253	3 828 566	2 680 005	6 497 610	213 589
	1998..	N	N	38 757	1 398 063	27 292	57 011	800 832	4 073 068	2 826 616	6 833 307	241 403
	1997..	360	424	37 280	1 327 456	25 734	53 998	750 942	3 934 823	2 657 535	6 594 554	244 431

¹Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during the year.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 2. Industry Statistics for Selected States: 2002

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
332912, Fluid power valve and hose fitting manufacturing												
United States	—	400	208	33 658	1 382 001	23 362	46 236	803 272	3 809 363	2 366 732	6 236 568	214 973
California	—	59	27	4 472	207 231	2 835	5 521	106 751	466 853	204 574	678 893	25 799
Connecticut	—	11	6	1 219	57 127	839	1 816	32 060	106 347	84 733	191 003	7 978
Florida	—	10	5	1 218	42 386	947	1 764	26 778	100 066	52 918	152 333	6 801
Georgia	—	7	3	312	10 705	213	453	6 151	28 862	16 988	46 787	1 154
Illinois	—	25	15	1 176	45 035	820	1 663	24 850	83 210	113 943	198 126	4 228
Indiana	—	18	12	1 163	37 447	739	1 553	24 722	178 725	138 784	323 494	6 633
Kansas	2	11	2	124	3 631	108	230	2 897	10 658	6 821	17 348	1 210
Michigan	—	41	25	3 666	138 711	2 680	5 532	89 432	386 300	217 513	608 271	26 410
Minnesota	—	17	8	1 128	48 542	775	1 596	28 163	108 753	70 536	181 979	8 432
New Jersey	1	10	5	463	18 634	266	541	6 998	31 592	30 001	61 805	1 764
New York	—	11	6	1 153	45 670	727	1 309	24 009	111 067	24 479	134 037	13 790
Ohio	—	43	25	4 872	190 871	3 532	6 968	113 434	567 172	432 215	1 027 714	39 397
Pennsylvania	—	14	8	856	29 501	629	1 201	19 044	87 463	34 447	115 408	2 659
South Dakota	—	3	2	234	5 772	186	314	3 880	11 488	18 922	30 323	717
Wisconsin	—	16	10	1 683	70 809	1 232	2 507	43 967	180 516	113 880	298 014	16 123

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 3. Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
332912, Fluid power valve and hose fitting manufacturing	
Companies ¹	number.. 335
All establishments ²	number.. 400
Establishments with 1 to 19 employees	number.. 192
Establishments with 20 to 99 employees	number.. 110
Establishments with 100 employees or more	number.. 98
All employees ³	number.. 33 658
Total compensation	\$1,000.. 1 799 519
Annual payroll	\$1,000.. 1 382 001
Total fringe benefits	\$1,000.. 417 518
Production workers, average for year	number.. 23 362
Production workers on March 12	number.. 23 377
Production workers on May 12	number.. 23 416
Production workers on August 12	number.. 23 399
Production workers on November 12	number.. 23 233
Production worker hours	1,000.. 46 236
Production worker wages	\$1,000.. 803 272
Total cost of materials	\$1,000.. 2 366 732
Materials, parts, containers, packaging, etc., used	\$1,000.. 1 987 835
Resales	\$1,000.. 202 947
Purchased fuels	\$1,000.. 9 852
Purchased electricity	\$1,000.. 46 645
Contract work	\$1,000.. 119 453
Quantity of electricity purchased for heat and power	1,000 kWh.. 769 267
Quantity of electricity generated less sold for heat and power	1,000 kWh.. -
Total value of shipments	\$1,000.. 6 236 568
Primary products value of shipments	\$1,000.. 5 049 095
Secondary products value of shipments	\$1,000.. 878 351
Total miscellaneous receipts	\$1,000.. 309 122
Value of resales	\$1,000.. 279 001
Contract receipts	\$1,000.. 1 640
Other miscellaneous receipts	\$1,000.. 28 481
Primary products specialization ratio	percent.. 85
Value of primary products shipments made in all industries	\$1,000.. 5 836 005
Value of primary products shipments made in this industry	\$1,000.. 5 049 095
Value of primary products shipments made in other industries	\$1,000.. 786 910
Coverage ratio	percent.. 87
Value added	\$1,000.. 3 809 363
Total inventories, beginning of year	\$1,000.. 1 219 396
Finished goods inventories	\$1,000.. 640 198
Work-in-process inventories	\$1,000.. 254 494
Materials and supplies inventories	\$1,000.. 324 704
Total inventories, end of year	\$1,000.. 1 144 818
Finished goods inventories	\$1,000.. 597 572
Work-in-process inventories	\$1,000.. 236 647
Materials and supplies inventories	\$1,000.. 310 599
Gross value of depreciable assets (acquisition costs) at beginning of year	\$1,000.. 2 656 490
Total capital expenditures (new and used)	\$1,000.. 214 973
Buildings and other structures (new and used)	\$1,000.. 42 250
Machinery and equipment (new and used)	\$1,000.. 172 723
Automobiles, trucks, etc., for highway use	\$1,000.. 5 912
Computers and peripheral data processing equipment	\$1,000.. 22 375
All other expenditures for machinery and equipment	\$1,000.. 144 436
Total retirements	\$1,000.. 134 238
Gross value of depreciable assets at end of year	\$1,000.. 2 737 225
Depreciation charges during year	\$1,000.. 186 081
Total rental payments	\$1,000.. 50 155
Buildings and other structures	\$1,000.. 27 951
Machinery and equipment	\$1,000.. 22 204
Total other expenses ⁴	\$1,000.. 377 502
Response coverage ratio ⁵	percent.. 76
Repair and maintenance services of buildings and/or machinery ⁴	\$1,000.. 57 213
Communications services ⁴	\$1,000.. 13 389
Legal services ⁴	\$1,000.. 8 238
Accounting, auditing, and bookkeeping services ⁴	\$1,000.. 3 874
Advertising and promotional services ⁴	\$1,000.. 10 100
Expensed computer hardware and supplies and purchased computer services ⁴	\$1,000.. 35 019
Refuse removal (including hazardous waste) services ⁴	\$1,000.. 4 796
Management consulting and administrative services ⁴	\$1,000.. 14 372
Taxes and license fees ⁴	\$1,000.. 21 673
All other expenses ⁴	\$1,000.. 208 827

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Based on Annual Survey of Manufactures (ASM) sample data.

⁵A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E ¹	All establishments ²	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
332912, Fluid power valve and hose fitting manufacturing											
All establishments	—	400	33 658	1 382 001	23 362	46 236	803 272	3 809 363	2 366 732	6 236 568	214 973
Establishments with—											
1 to 4 employees	9	92	187	6 894	146	268	4 091	14 192	10 100	24 289	D
5 to 9 employees	8	46	e	D	D	D	D	D	D	D	2 322
10 to 19 employees	5	54	748	30 990	542	1 109	19 292	79 171	44 940	122 460	4 932
20 to 49 employees	3	58	1 816	71 569	1 247	2 516	38 838	175 325	93 473	269 103	12 376
50 to 99 employees	—	52	3 727	146 608	2 494	5 027	78 559	368 331	237 492	613 242	18 519
100 to 249 employees	—	61	9 573	370 141	6 541	13 111	207 356	958 679	605 291	1 583 423	79 032
250 to 499 employees	—	23	7 910	323 773	5 440	10 681	188 800	838 590	529 257	1 392 210	36 177
500 to 999 employees	—	13	8 237	340 099	6 078	11 709	217 115	1 017 348	582 556	1 608 785	54 640
1,000 to 2,499 employees	—	1	g	D	D	D	D	D	D	D	D
2,500 employees or more	—	—	—	—	—	—	—	—	—	—	—
Administrative records ⁴	9	160	885	34 794	655	1 331	20 786	73 001	53 783	126 034	6 137

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 5. Industry Statistics by Primary Product Class Specialization: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments ¹	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ²	Payroll (\$1,000)	Number ²	Hours (1,000)	Wages (\$1,000)				
332912	Fluid power valve and hose fitting manufacturing	400	33 658	1 382 001	23 362	46 236	803 272	3 809 363	2 366 732	6 236 568	214 973
3329121	Aerospace type hydraulic fluid power valves.....	23	3 443	160 390	2 361	4 705	96 777	453 165	244 611	699 278	27 475
3329123	Aerospace type pneumatic fluid power valves.....	11	4 182	212 721	2 699	5 343	116 673	633 314	346 392	996 998	21 497
3329125	Nonaerospace type hydraulic directional control valves	15	2 349	94 761	1 623	3 039	49 297	273 197	165 307	435 220	16 744
3329127	Nonaerospace type hydraulic valves, except directional control	32	2 539	101 493	1 664	3 249	51 398	201 495	208 999	433 451	13 813
3329129	Nonaerospace type pneumatic directional control valves	20	3 163	115 017	2 151	4 404	68 528	355 685	266 702	631 156	23 941
332912B	Nonaerospace type pneumatic valves, except directional control ..	7	954	44 586	634	1 283	23 680	134 057	66 133	197 312	3 548
332912D	Parts for fluid power valves	7	761	31 619	492	984	15 046	70 616	35 776	96 062	9 325
332912F	Aerospace type hydraulic and pneumatic fluid power hose or tube end fittings and assemblies	20	3 244	135 521	2 069	4 224	70 428	357 632	144 818	504 261	22 655
332912H	Nonaerospace type flared (metal) fittings, couplings, and assemblies of tubing used in fluid power transfer systems	45	2 843	99 395	2 096	4 214	63 394	203 786	203 695	406 335	13 536
332912J	Nonaerospace type flareless fittings and couplings, including nonmetal fittings, used in fluid power transfer systems	13	2 759	109 590	2 069	4 111	67 863	330 187	191 842	537 853	21 520
332912L	Nonaerospace type hydraulic and pneumatic fittings and couplings for hose	28	4 258	156 032	3 229	6 341	104 696	505 432	298 626	812 893	27 822
332912N	Nonaerospace type hydraulic and pneumatic assemblies of hose	13	1 472	53 589	1 066	1 923	35 889	145 338	108 678	255 147	3 428

¹Includes establishments with payroll at any time during the year.

²Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6a. Products Statistics: 2002 and 1997

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
332912	Fluid power valve and hose fitting manufacturing	2002.. N 1997.. N	X X	X X	5 836 005 6 285 684
3329121	Aerospace type hydraulic fluid power valves	2002.. N 1997.. N	X X	X X	728 918 672 902
33291211	Aerospace type hydraulic fluid power valves	2002.. N 1997.. N	X X	X X	728 918 672 902
3329121100	Aerospace type hydraulic fluid power valves ¹	2002.. 53 1997.. 59	X X	X X	728 918 672 902
3329123	Aerospace type pneumatic fluid power valves	2002.. N 1997.. N	X X	X X	625 273 499 415
33291231	Aerospace type pneumatic fluid power valves	2002.. N 1997.. N	X X	X X	625 273 499 415
3329123100	Aerospace type pneumatic fluid power valves ¹	2002.. 27 1997.. 39	X X	X X	625 273 499 415
3329125	Nonaerospace type hydraulic directional control valves	2002.. N 1997.. N	X X	X X	385 835 536 935
33291251	Nonaerospace type hydraulic directional control valves	2002.. N 1997.. N	X X	X X	385 835 536 935
3329125100	Nonaerospace type hydraulic directional control valves ¹	2002.. 41 1997.. 53	X X	X X	385 835 536 935
3329127	Nonaerospace type hydraulic valves, except directional control	2002.. N 1997.. N	X X	X X	561 641 719 670
33291271	Nonaerospace type hydraulic valves, except directional control	2002.. N 1997.. N	X X	X X	561 641 719 670
3329127100	Nonaerospace type hydraulic valves, except directional control ¹	2002.. 47 1997.. 53	X X	X X	561 641 719 670
3329129	Nonaerospace type pneumatic directional control valves	2002.. N 1997.. N	X X	X X	512 388 619 943
33291291	Nonaerospace type pneumatic directional control valves	2002.. N 1997.. N	X X	X X	512 388 619 943
3329129100	Nonaerospace type pneumatic directional control valves ¹	2002.. 32 1997.. 42	X X	X X	512 388 619 943
332912B	Nonaerospace type pneumatic valves, except directional control	2002.. N 1997.. N	X X	X X	142 130 192 604
332912B1	Nonaerospace type pneumatic valves, except directional control	2002.. N 1997.. N	X X	X X	142 130 192 604
332912B100	Nonaerospace type pneumatic valves, except directional control ¹	2002.. 20 1997.. 40	X X	X X	142 130 192 604
332912D	Parts for fluid power valves	2002.. N 1997.. N	X X	X X	218 219 212 581
332912D1	Parts for fluid power valves	2002.. N 1997.. N	X X	X X	218 219 212 581
332912D100	Parts for fluid power valves ¹	2002.. 31 1997.. 53	X X	X X	218 219 212 581
332912F	Aerospace type hydraulic and pneumatic fluid power hose or tube end fittings and assemblies	2002.. N 1997.. N	X X	X X	564 630 541 440
332912F1	Aerospace type hydraulic and pneumatic fluid power hose or tube end fittings and assemblies	2002.. N 1997.. N	X X	X X	564 630 541 440
332912F100	Aerospace type hydraulic and pneumatic fluid power hose or tube end fittings and assemblies ¹	2002.. 43 1997.. 36	X X	X X	564 630 541 440
332912H	Nonaerospace type flared (metal) fittings, couplings, and assemblies of tubing used in fluid power transfer systems	2002.. N 1997.. N	X X	X X	398 509 389 751
332912H1	Nonaerospace type flared (metal) fittings, couplings, and assemblies of tubing used in fluid power transfer systems	2002.. N 1997.. N	X X	X X	398 509 389 751
332912H100	Nonaerospace type flared (metal) fittings, couplings, and assemblies of tubing used in fluid power transfer systems ¹	2002.. 52 1997.. 30	X X	X X	398 509 389 751
332912J	Nonaerospace type flareless fittings and couplings, including nonmetal fittings, used in fluid power transfer systems	2002.. N 1997.. N	X X	X X	545 159 512 409
332912J1	Nonaerospace type flareless fittings and couplings, including nonmetal fittings, used in fluid power transfer systems	2002.. N 1997.. N	X X	X X	545 159 512 409
332912J100	Nonaerospace type flareless fittings and couplings, including nonmetal fittings, used in fluid power transfer systems ¹	2002.. 23 1997.. 27	X X	X X	545 159 512 409
332912L	Nonaerospace type hydraulic and pneumatic fittings and couplings for hose	2002.. N 1997.. N	X X	X X	645 468 849 786
332912L1	Nonaerospace type hydraulic and pneumatic fittings and couplings for hose	2002.. N 1997.. N	X X	X X	645 468 849 786
332912L100	Nonaerospace type hydraulic and pneumatic fittings and couplings for hose ¹	2002.. 29 1997.. 53	X X	X X	645 468 849 786
332912N	Nonaerospace type hydraulic and pneumatic assemblies of hose	2002.. N 1997.. N	X X	X X	274 416 289 050

See footnotes at end of table.

Table 6a. **Products Statistics: 2002 and 1997—Con.**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
332912	Fluid power valve and hose fitting manufacturing—Con.				
332912N	Nonaerospace type hydraulic and pneumatic assemblies of hose—Con.				
332912N1	Nonaerospace type hydraulic and pneumatic assemblies of hose	2002.. N	X	X	274 416
		1997.. N	X	X	289 050
332912N100	Nonaerospace type hydraulic and pneumatic assemblies of hose ¹	2002.. 28	X	X	274 416
		1997.. 28	X	X	289 050
332912W	Fluid power valve and hose fitting manufacturing, nsk, total	2002.. N	X	X	233 419
		1997.. N	X	X	249 198
332912WY	Fluid power valve and hose fitting manufacturing, nsk, total	2002.. N	X	X	233 419
		1997.. N	X	X	249 198
332912WYWW	Fluid power valve and hose fitting manufacturing, nsk, for nonadministrative-record establishments	2002.. N	X	X	188 746
		1997.. N	X	X	107 006
332912WYWY	Fluid power valve and hose fitting manufacturing, nsk, for administrative-record establishments	2002.. N	X	X	44 673
		1997.. N	X	X	142 192

¹For additional detail, see Current Industrial Report MA333N, Fluid Power Products.

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p—10 to 19 percent estimated; q—20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6b. **Product Class Shipments for Selected States: 2002 and 1997**

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS product class code	Product class and geographic area	Value of product shipments (\$1,000)
3329121	Aerospace type hydraulic fluid power valves	
	United States..... 2002..	728 918
	..... 1997..	672 902
	California..... 2002..	150 232
	..... 1997..	189 630
	Illinois..... 2002..	20 153
	..... 1997..	N
	New York..... 2002..	93 134
	..... 1997..	90 297
	Ohio..... 2002..	15 197
	..... 1997..	18 197
3329123	Aerospace type pneumatic fluid power valves	
	United States..... 2002..	625 273
	..... 1997..	499 415
	California..... 2002..	163 359
	..... 1997..	116 832
	New York..... 2002..	20 320
	..... 1997..	N
	Ohio..... 2002..	5 754
	..... 1997..	14 670
3329125	Nonaerospace type hydraulic directional control valves	
	United States..... 2002..	385 835
	..... 1997..	536 935
	California..... 2002..	29 998
	..... 1997..	4 629
	Illinois..... 2002..	22 423
	..... 1997..	N
	Ohio..... 2002..	47 332
	..... 1997..	87 306
3329127	Nonaerospace type hydraulic valves, except directional control	
	United States..... 2002..	561 641
	..... 1997..	719 670
	Illinois..... 2002..	184 490
	..... 1997..	263 295
	Michigan..... 2002..	4 020
	..... 1997..	9 779
	Minnesota..... 2002..	53 820
	..... 1997..	N
	Ohio..... 2002..	70 520
	..... 1997..	128 171
	Pennsylvania..... 2002..	7 984
	..... 1997..	N
	Wisconsin..... 2002..	48 760
	..... 1997..	32 914
3329129	Nonaerospace type pneumatic directional control valves	
	United States..... 2002..	512 388
	..... 1997..	619 943
	Michigan..... 2002..	182 431
	..... 1997..	260 896
	Ohio..... 2002..	34 761
	..... 1997..	37 691
	Pennsylvania..... 2002..	29 512
	..... 1997..	N
332912B	Nonaerospace type pneumatic valves, except directional control	
	United States..... 2002..	142 130
	..... 1997..	192 604
	Illinois..... 2002..	8 029
	..... 1997..	7 858
	Ohio..... 2002..	14 234
	..... 1997..	28 780
332912D	Parts for fluid power valves	
	United States..... 2002..	218 219
	..... 1997..	212 581
	California..... 2002..	39 728
	..... 1997..	22 514
	Michigan..... 2002..	12 073
	..... 1997..	60 535
	New York..... 2002..	20 335
	..... 1997..	12 058
	Ohio..... 2002..	11 378
	..... 1997..	17 663
332912F	Aerospace type hydraulic and pneumatic fluid power hose or tube end fittings and assemblies	
	United States..... 2002..	564 630
	..... 1997..	541 440
	California..... 2002..	159 301
	..... 1997..	149 798
	New York..... 2002..	16 883
	..... 1997..	N
332912H	Nonaerospace type flared (metal) fittings, couplings, and assemblies of tubing used in fluid power transfer systems	
	United States..... 2002..	398 509
	..... 1997..	389 751
	California..... 2002..	7 272
	..... 1997..	N
	Michigan..... 2002..	92 038
	..... 1997..	99 640
	Ohio..... 2002..	126 844
	..... 1997..	140 723

See footnotes at end of table.

Table 6b. **Product Class Shipments for Selected States: 2002 and 1997—Con.**

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS product class code	Product class and geographic area	Value of product shipments (\$1,000)
332912H	Nonaerospace type flared (metal) fittings, couplings, and assemblies of tubing used in fluid power transfer systems—Con.	
	United States—Con.	
	Wisconsin	2002.. 3 329 1997.. 21 300
332912J	Nonaerospace type flareless fittings and couplings, including nonmetal fittings, used in fluid power transfer systems	
	United States	2002.. 545 159 1997.. 512 409
	Ohio	2002.. 378 292 1997.. 302 475
332912L	Nonaerospace type hydraulic and pneumatic fittings and couplings for hose	
	United States	2002.. 645 468 1997.. 849 786
	Indiana	2002.. 18 146 1997.. 38 722
	Ohio	2002.. 216 952 1997.. 256 459
	Pennsylvania	2002.. 44 878 1997.. 36 415
332912N	Nonaerospace type hydraulic and pneumatic assemblies of hose	
	United States	2002.. 274 416 1997.. 289 050
	Illinois	2002.. 54 562 1997.. 56 671

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 7. Materials Consumed by Kind: 2002 and 1997

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
332912	Fluid power valve and hose fitting manufacturing		
00900001	Total materials .....2002..	X	1 987 835
	.....1997..	X	2 190 056
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products .....2002..	X	243 979
	.....1997..	X	280 670
332000AC	Metal stampings .....2002..	X	15 765
	.....1997..	X	15 436
33290003	Valves, fittings, and couplings purchased for further assembly (excluding forgings) .....2002..	X	225 657
	.....1997..	X	224 707
33200029	Other fabricated metal products (excluding forgings, metal stampings, valves, fittings, couplings, bolts, nuts, screws, washers, rivets, and other screw machine products) .....2002..	X	159 257
	.....1997..	X	144 355
33151101	Iron castings (rough and semifinished) .....2002..	X	69 719
	.....1997..	X	76 725
33151009	Steel castings (rough and semifinished) .....2002..	X	12 590
	.....1997..	X	11 845
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) .....2002..	X	38 441
	.....1997..	X	56 154
33152500	Copper and copper-base alloy castings (rough and semifinished) .....2002..	X	1 896
	.....1997..	X	4 667
33152009	Other nonferrous castings (rough and semifinished) .....2002..	X	37 589
	.....1997..	X	31 809
33211101	Iron and steel forgings .....2002..	X	34 098
	.....1997..	X	43 418
33211201	Nonferrous forgings .....2002..	X	7 635
	.....1997..	X	41 982
33120007	Steel bars, bar shapes, and plate (excluding castings, forgings, and fabricated metal products) .....2002..	X	217 810
	.....1997..	X	253 348
33120016	Steel sheet and strip (including tinplate) .....2002..	X	20 765
	.....1997..	X	N
33120033	All other steel shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	40 213
	.....1997..	X	40 213
33142105	Copper and copper-base alloy rod, bar, and mechanical wire (including extruded and drawn shapes) .....2002..	X	D
	.....1997..	X	D
33142135	Copper and copper-base alloy pipe and tube (excluding castings, forgings, and fabricated metal products) .....2002..	X	28 262
	.....1997..	X	10 795
33142145	All other copper and copper-base alloy shapes and forms (excluding castings, forgings, fabricated metal products, refinery shaped rods, bars, mechanical wire, pipes, and tubes) .....2002..	X	21 185
	.....1997..	X	33 286
33100038	Aluminum and aluminum-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	105 685
	.....1997..	X	N
33100082	Other nonferrous metal shapes and forms (excluding aluminum and aluminum-base alloy and copper and copper-base alloy castings, forgings, and fabricated metal products) .....2002..	X	4 787
	.....1997..	X	N
00190060	Scrap, including iron, steel, aluminum and aluminum-base alloy (excluding home scrap) .....2002..	X	D
	.....1997..	X	D
33531225	Fractional horsepower electric motors and generators (less than 1 hp) .....2002..	X	3 708
	.....1997..	X	N
32221001	Paperboard containers, boxes, and corrugated paperboard .....2002..	X	16 895
	.....1997..	X	19 955
32622003	Hydraulic and pneumatic hose (without fittings), rubber and plastics inner tube type, wire or textile reinforced .....2002..	X	74 307
	.....1997..	X	81 518
32622005	Other rubber and plastics hose and belting .....2002..	X	718
	.....1997..	X	718
33999103	Gaskets (all types), and packing and sealing devices .....2002..	X	15 204
	.....1997..	X	14 731
32600017	Fabricated rubber products (excluding tires, tubes, hose, belting, and gaskets) .....2002..	X	14 496
	.....1997..	X	9 491
32610011	Fabricated plastics products (excluding gaskets) .....2002..	X	20 991
	.....1997..	X	20 473
00970099	All other materials and components, parts, containers, and supplies .....2002..	X	323 550
	.....1997..	X	519 756
00971000	Materials, ingredients, containers, and supplies, nsk .....2002..	X	105 693
	.....1997..	X	127 947

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.